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The Changing Faces of New Hampshire

Recent Demographic Trends in the Granite State

KENNETH M. JOHNSON



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The Changing Faces of New Hampshire

Recent Demographic Trends in the Granite State

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A Carsey Institute Report on New England

Summary

An Overview of Demographic Change

New Hampshire gained 79,000 residents (6.4 percent) between 2000 and 2006 according to the latest Census Bureau estimates reaching a population of 1,315,000 in July of 2006. New Hampshire's gain matches the national average and exceeds the New England average by a significant margin. Most of this growth came from migration. Families with children and seniors were most likely to move to New Hampshire, but the state is now also gaining young adults.

Migration Produced Population and Income Gains in New Hampshire

- Migration accounted for most of New Hampshire's population gain of 79,000 between 2000 and 2006.
- The state gained nearly 51,000 residents from migration between 2000 and 2006.
- New Hampshire gained at least \$1.4 billion in income from migration between 2001 and 2005.
- The Boston metropolitan area was the largest source of migrants. Nearly 80,000 people moved from Boston to New Hampshire between 2001 and 2005.
- New Hampshire is gaining migrants at every age. Gains are greatest for family age households. The older population is also growing from migration and the state is even gaining young adults.
- New Hampshire's young adult population remains smaller now than in 1990, but is growing again.
- The young adult decline occurred because few babies were born 25 to 35 years ago, not because of a substantial net migration loss of young adults.
- Most migrants to New Hampshire came from elsewhere in the United States.
- Natural increase also accounts for a significant share of the population gain and immigration contributed a modest amount.

Demographic Trends within New Hampshire

- Modest increases have been made to diversity recently, but New Hampshire remained 93.7 percent non-Hispanic white in 2006.
- Minorities represented only 4.7 percent of the 2000 population, but accounted for 30 percent of the growth between 2000 and 2006.
- The number of older adults in New Hampshire will increase rapidly during the next two decades because of aging in place and a migration gain of older adults.
- Growth rates were greatest in nonmetropolitan New Hampshire, where older domestic migrants were attracted to recreation and amenity areas.
- Metropolitan gains were largest for family age households and were fueled by the peripheral growth of the proximate Boston metropolitan area.
- New Hampshire gained migrants in exchanges with the rest of New England, but lost migrants to Maine.
- The state lost migrants to other regions of the country with losses to the South being particularly pronounced.

Introduction

New Hampshire reflects a surprising degree of demographic, geographic, and economic diversity for its size. This diversity combined with its long history and the strong tradition of independent local governments has produced a complex tapestry of demographic change across the states. New Hampshire spans a broad spectrum of landscapes from the ever expanding periphery of the Boston metropolitan area to the south; through mill towns that ushered in the Industrial Revolution and have since transformed themselves into diversified economic centers; to picturesque villages that look much as they did centuries ago; past sparkling lakes, ski slopes, and beautiful vistas that have attracted vacationers and second homeowners for generations; to the working forests and rugged mountains of the north. Demographic trends in New Hampshire play out against the backdrop of this diverse landscape through a complex interaction between fertility, mortality, and migration. With only 1.3 million people, New Hampshire is hardly a major player on the nation's demographic stage. But, with sprawling suburbs, struggling industrial towns, fast growing amenity areas and isolated rural villages, New Hampshire includes many of the diverse strands that together compose the changing demographic fabric of the nation.

The future of New Hampshire depends in part on the size, composition, and distribution of its population. This report provides insights into the patterns of demographic change underway in the state using the latest data available. My goals here are threefold:

- Summarize current population redistribution trends in New Hampshire
- Show how natural increase (the balance of births and deaths), domestic migration and immigration each contributed to these population trends
- Document how these demographic trends vary by age, race and Hispanic origin and geography.

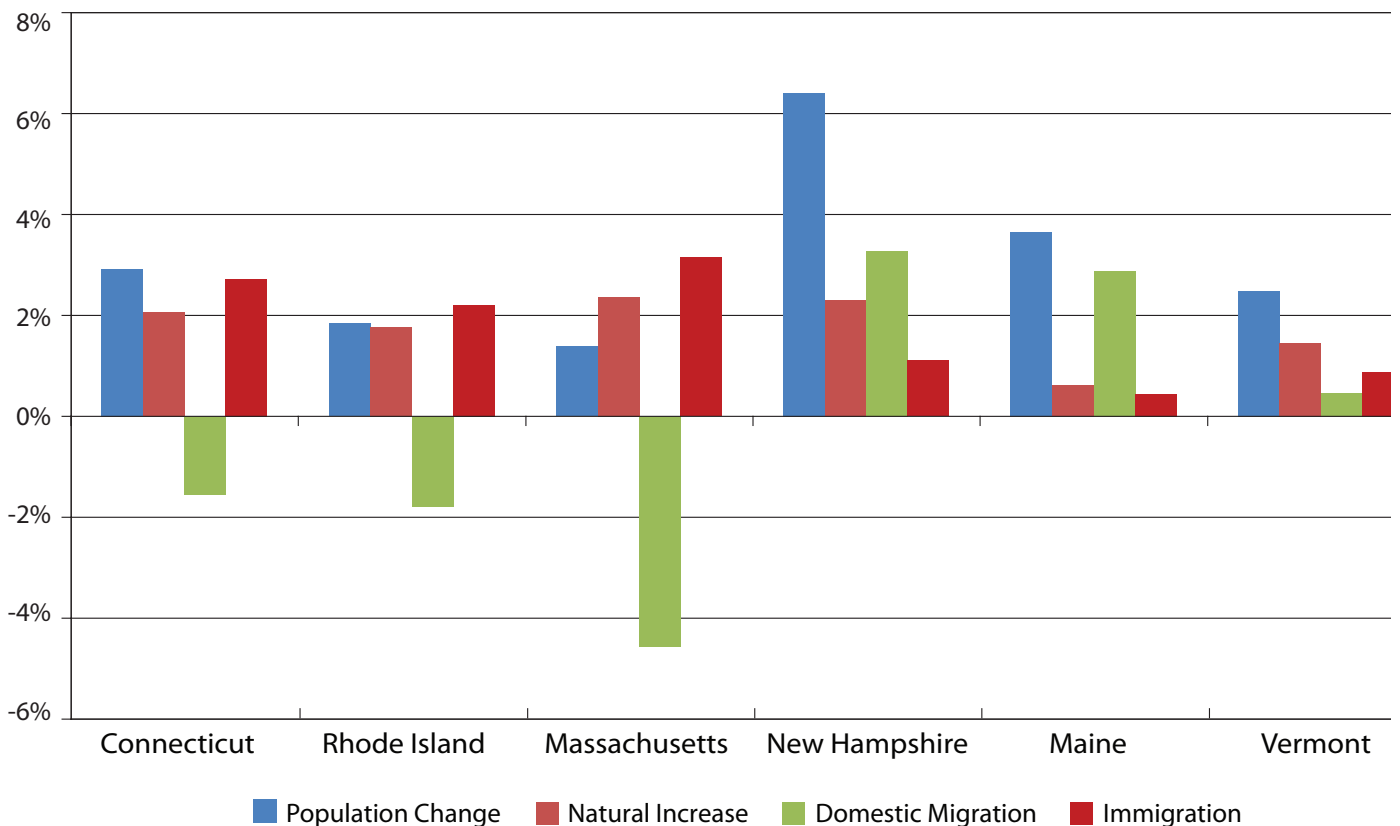
Population Redistribution Trends in New Hampshire

New Hampshire gained 79,000 residents (6.4 percent) between 2000 and 2006 according to Census Bureau estimates. The state's population in July 2006 was 1,315,000. New Hampshire's current annual growth rate is slightly lower than it was during the 1990s, but it matches that of the United States and exceeds the growth rate in the rest of New England by a significant margin (*Figure 1*). Demographic trends in New Hampshire are best understood when compared to those of neighboring states. In the northern tier of New England (Maine, New Hampshire, and Vermont), the rates of population growth are higher with domestic migration accounting for much of the growth. This trend is more pronounced in New Hampshire, which is growing much faster than any other state in the region, but is evident in Maine and Vermont as well.

Natural increase is the second largest contributor to population growth in the northern tier, with immigration contributing only modestly. In southern New England (Massachusetts, Connecticut, and Rhode Island), the situation is quite different. Rates of population gains were modest there and each state experienced net domestic out-migration, a significant point of contrast with the northern tier. The domestic migration loss was greatest in Massachusetts, both in percentage and absolute terms. Immigration provided the bulk of the population gain in southern New England though it was supplemented by natural increase.

Many of the fastest growing places in New England are concentrated in southern and central New Hampshire (*Figure 2*). Rapid gains there contrast sharply with areas of widespread

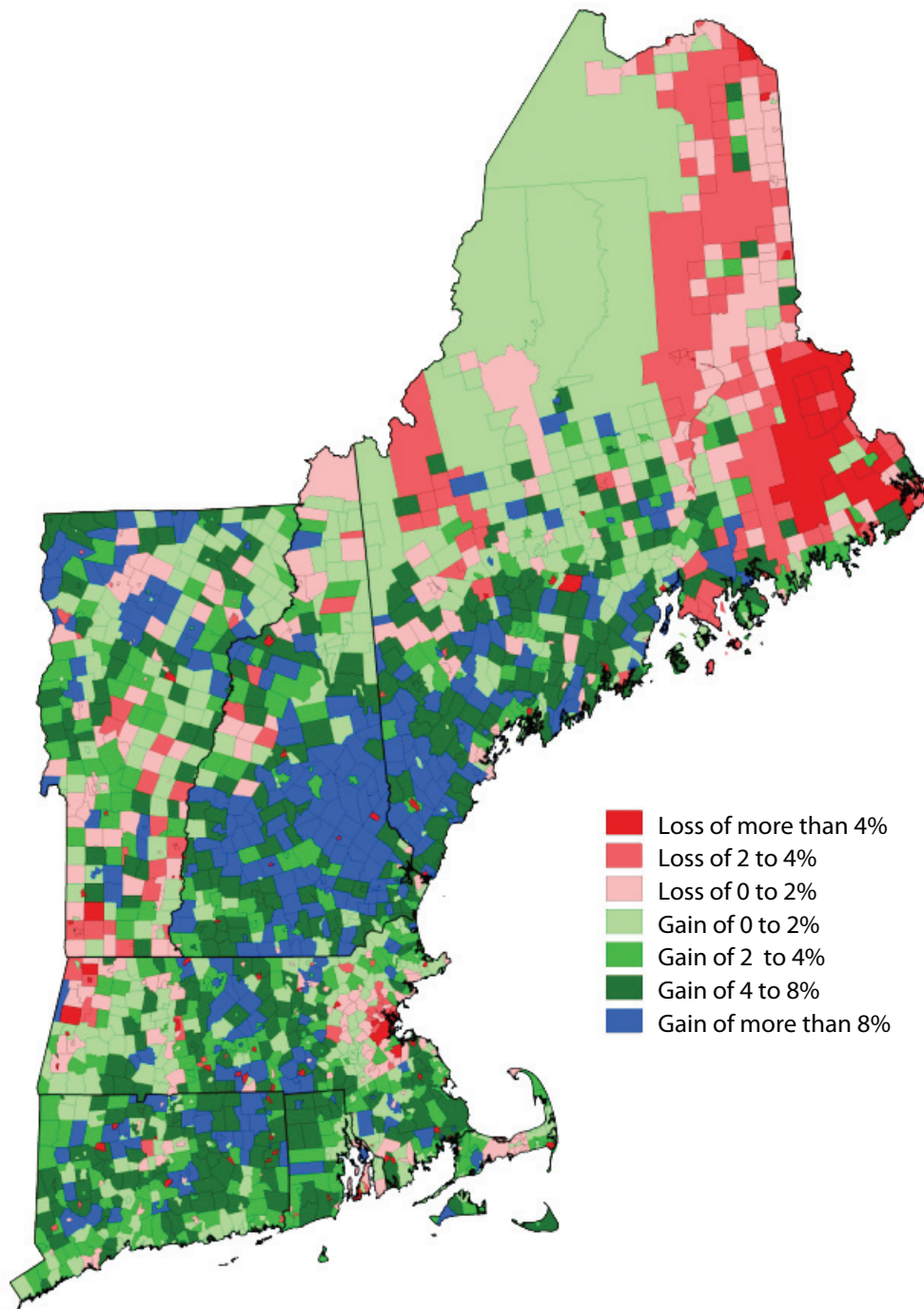
FIGURE 1: COMPONENTS OF DEMOGRAPHIC CHANGE NEW ENGLAND STATES, 2000-2006



population losses in the losses in the Boston metropolitan core. The rapid gains in New Hampshire are stimulated by two distinct, but related trends. The first is the peripheral sprawl of the Boston metropolitan area. Population growth rates are highest in a broad band around the outer edge of the Boston metropol-

itan area including much of southern New Hampshire. These trends reflect the continued peripheral spread of metropolitan Boston that in some areas is spilling over the urban edge into surrounding rural areas. A second growth cluster centers on the recreational areas in central New Hampshire where lakes,

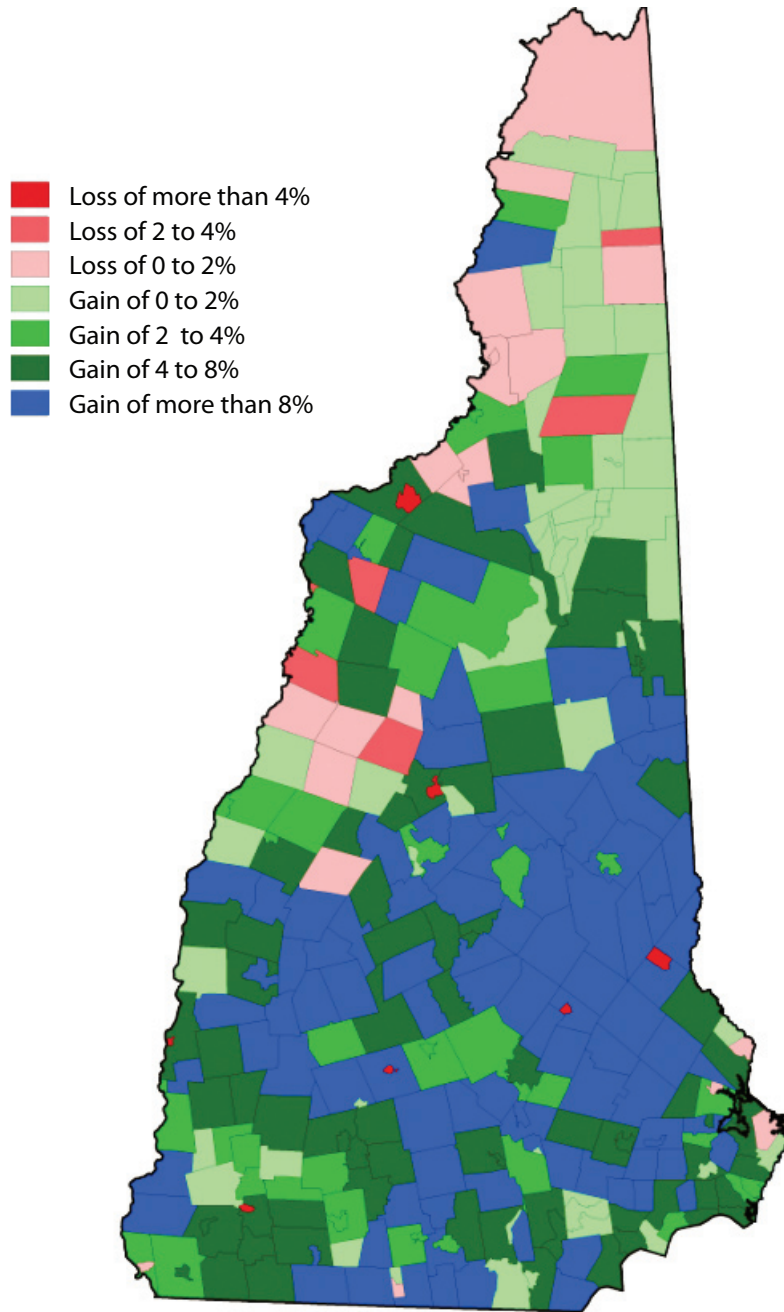
FIGURE 2: POPULATION CHANGE 2000-2005



mountains, and beautiful vistas have attracted vacationers and second homeowners for generations (*Figure 3*). In contrast, slow growth or population loss is occurring in the north and scattered pockets of west central New Hampshire. This selective deconcentration of the population is consistent with na-

tional trends that document high growth in recreational areas and along the urban edge coupled with population stagnation or loss in remote areas dependent on extractive industries (i.e. forest products, farming, and mining).

FIGURE 3: POPULATION CHANGE 2000-2005



Demographic Components of Population Change

Population change in New Hampshire is the result of a complex interaction between several demographic factors. Natural increase (the excess of births over deaths) contributes to population increase in most areas of the state. Natural increase has diminished in New Hampshire recently as the population ages and birth rates fall. Increasingly, population growth depends on migration. However, net migration (the difference between the number of individuals moving into and out of an area) has a far more differential effect; increasing the population of some areas and decreasing it elsewhere. It is useful to disaggregate overall migration change into two separate components. The first is domestic migration, which includes the movement of a person between locations in the United States. The second type is net immigration, which is the difference between the number of people coming into an area from outside the country and the number of people leaving the country.

Most of New Hampshire's population (62 percent) resides in its three metropolitan counties (Hillsborough, Rockingham, and Strafford) that contain 819,000 residents and have grown 6.3 percent since 2000 (*Figure 4*). Compared to national figures, New Hampshire has a much larger share of its population (38 percent) residing in nonmetropolitan (rural) areas. Nonmetropolitan counties that are proximate to metropolitan areas are growing the fastest (7.9 percent). In contrast, nonmetropolitan counties that are not near metropolitan areas are growing the slowest (3.9 percent). Such rapid growth in nonmetropolitan areas is consistent with trends elsewhere in New England, though metropolitan growth rates generally exceed those in nonmetropolitan areas elsewhere in the country.

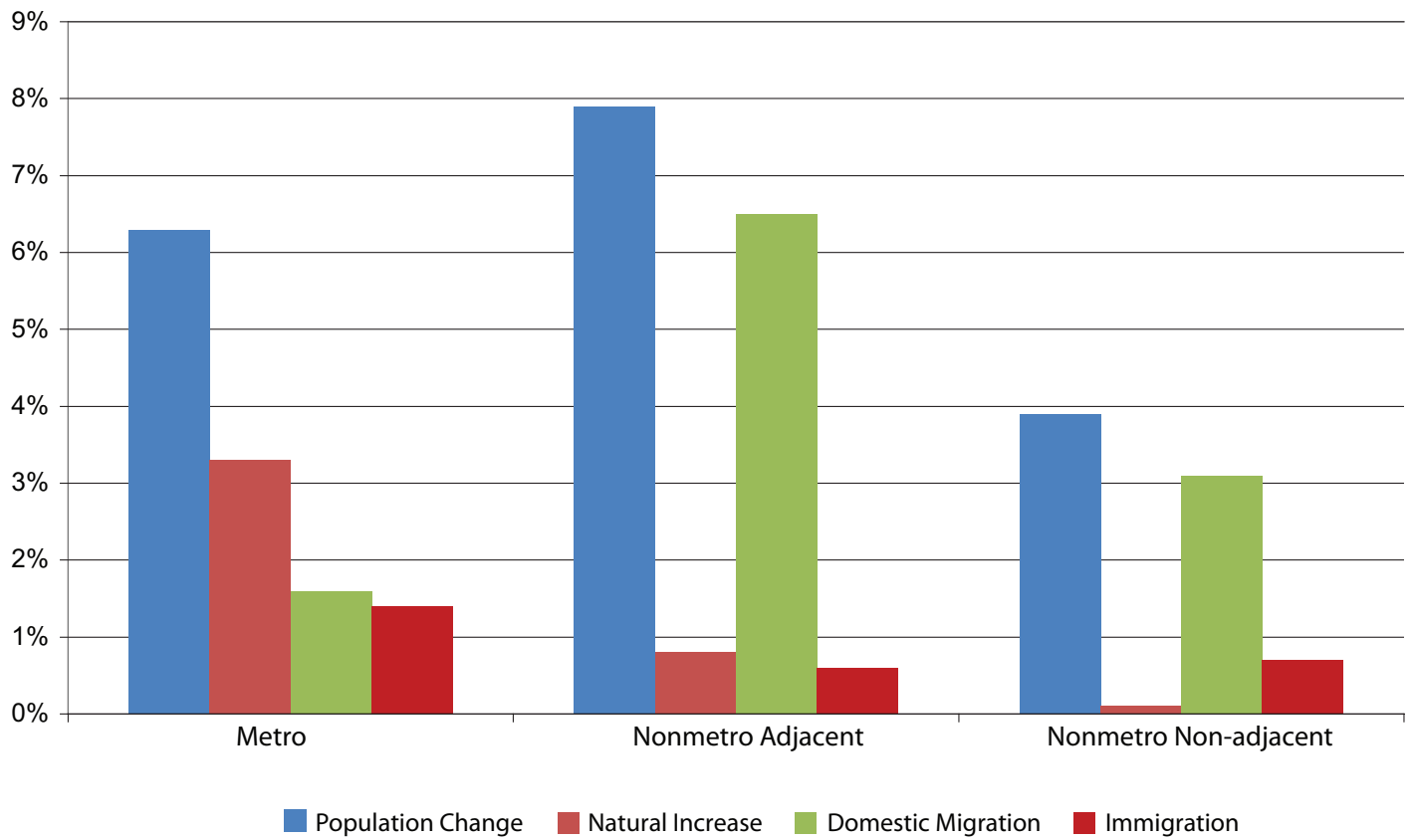
Recent population growth in New Hampshire has been stimulated by all three of the demographic components. The largest contributor has been domestic migration, which accounted for nearly 47 percent of the overall population gain. Natural increase contributed an additional 36 percent of the growth with

immigration responsible for the remaining 17 percent. New Hampshire and Maine are the only states in New England to receive a significant volume of domestic migration.

In New Hampshire's three metropolitan counties, natural increase was the most important source of population increase. Between 2000 and 2006, there were 60,400 births in metropolitan New Hampshire compared to 34,700 deaths, producing a natural increase of roughly 25,700 (3.3 percent) (*Figure 4*). This natural increase was supplemented by a net migration gain of 3.0 percent. In all, 23,000 more people moved into metropolitan areas than moved out. This migration gain was fairly evenly balanced between domestic migration (12,000) and immigration (11,000). This is consistent with trends elsewhere in the eastern and midwestern United States; however, the prominence of domestic migration in the growth of metropolitan New Hampshire is unusual in New England.

Population growth in nonmetropolitan New Hampshire actually exceeds the metropolitan gains. Though unusual nationally, this is common in New England. An important difference between nonmetropolitan and metropolitan New Hampshire is how the demographic components of change interact to produce this population increase. Domestic migration accounted for over 81 percent of the population increase in rural New Hampshire, but for only 25 percent of the metropolitan population increase. In contrast, natural increase was important in metropolitan areas, but contributed little to nonmetropolitan population gains. Gains from natural increase were minimal in nonadjacent counties; here domestic migration was the only source of significant population increase. In adjacent counties, the substantial domestic migration gain produced the highest rates of population increase in the state.

FIGURE 4: COMPONENTS OF DEMOGRAPHIC CHANGE NEW HAMPSHIRE, 2000-2006



Source: Census 2006 FSCPE

Population Change by Race and Hispanic Origin

New Hampshire was 93.7 percent non-Hispanic white in 2006, making it one of the least diverse states in the United States (*Figure 5*). Hispanics, the largest minority, numbered just under 30,000 (2.3 percent) and were followed closely by Asians at 24,000 (1.8 percent). Blacks represent .9 percent of the population with all other groups representing the remaining 1.3 percent. Metropolitan areas are 92.4 percent non-Hispanic white compared to 96.1 percent in nonmetropolitan New Hampshire. Hispanics are the largest minority (3.0 percent) in metropolitan counties, while in nonmetropolitan areas Asians are the largest minority (1.1 percent) followed closely by Hispanics.

There were modest changes in the racial and Hispanic composition of New Hampshire between 2000 and 2006 (*Figure 6*). Though minorities represented only 4.7 percent of New Hamp-

shire's population in 2000, they produced over 30 percent of the population gain between 2000 and 2006. The minority population grew by 24,000 (41.3 percent) to 82,000 during the period. The white population grew by only 55,000 (4.7 percent) to 1,233,000. Percentage gains among Asians, Hispanic and African Americans all exceeded 40 percent. Minority population gains were greater in metropolitan New Hampshire, where nearly 40 percent of the total population gain was from minorities though they made up only 5.6 percent of the metropolitan population in 2000. In nonmetropolitan areas, minority population gains were 16 percent of the total. Thus, while the numerical gains for whites continue to exceed those for minorities, minority growth rates are significantly higher. The net result is that the proportion of New Hampshire's population that is minority increased slightly between 2000 and 2006.

FIGURE 5: NEW HAMPSHIRE METROPOLITAN OR NONMETROPOLITAN STATUS

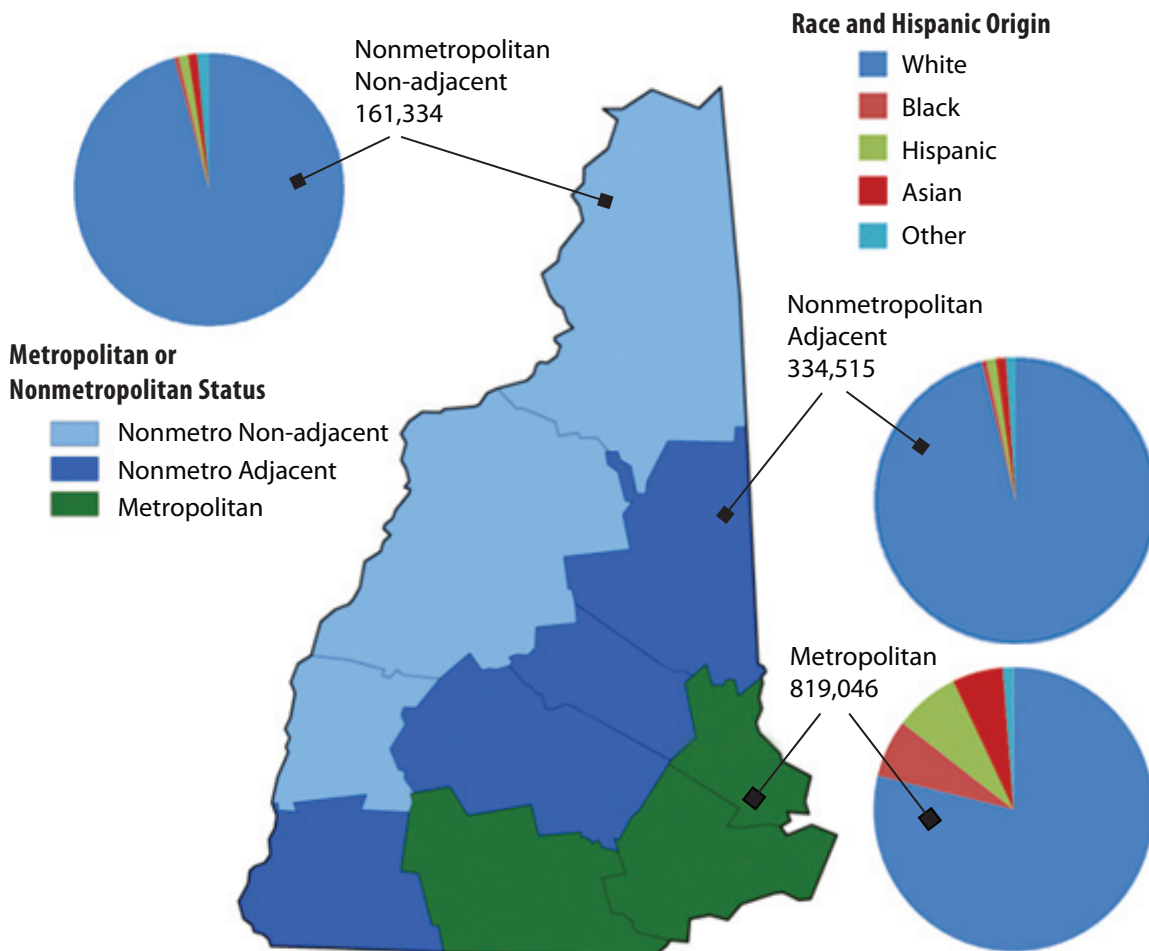
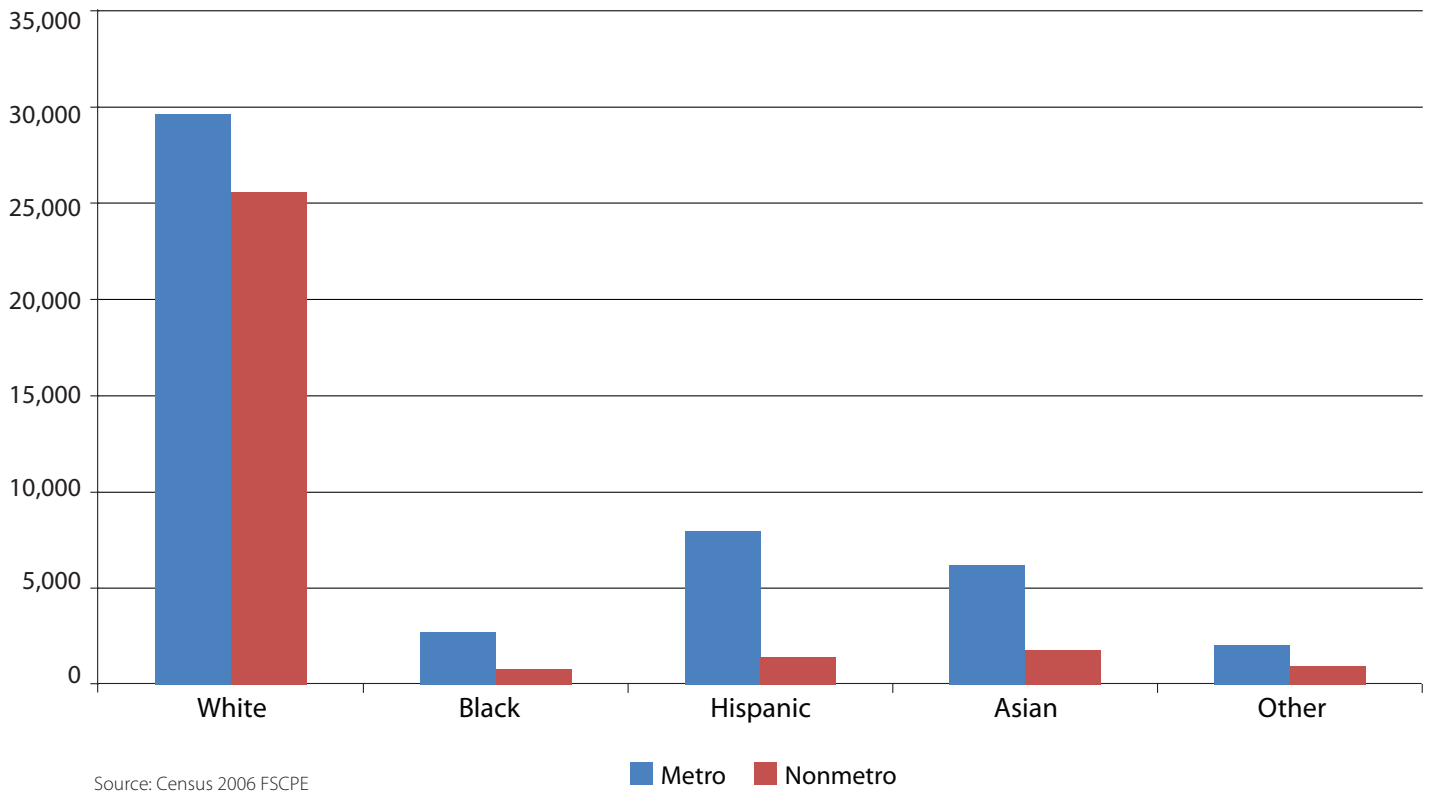


FIGURE 6: NEW HAMPSHIRE POPULATION CHANGE BY RACE AND HISPANIC ORIGIN, 2000 TO 2006



Age-Specific Migration Patterns

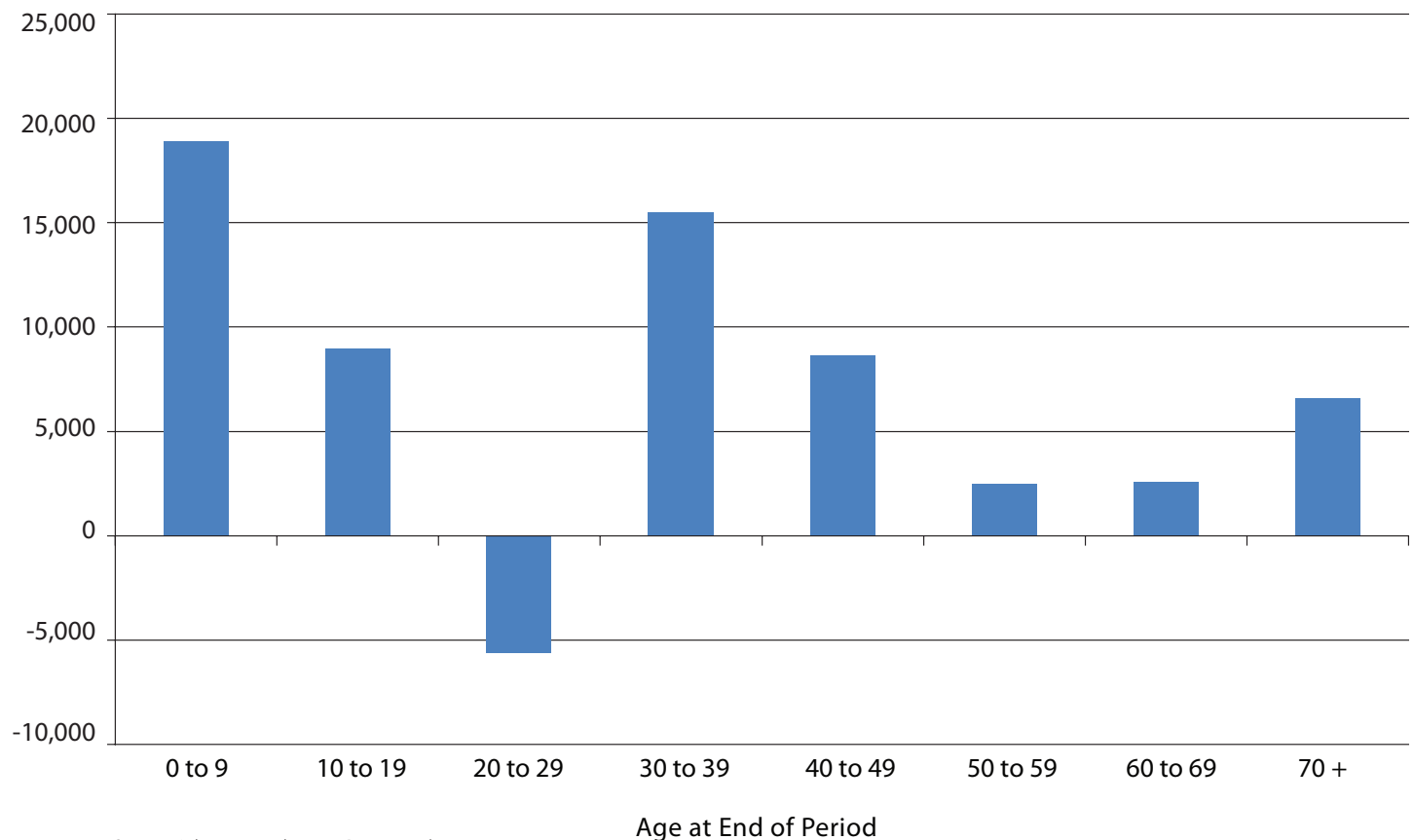
Migration produced most of the recent growth in New Hampshireⁱⁱ. Examining net migration by age, race, and location provides additional insights into the demographic change underway in the state.

New Hampshire gained migrants in virtually every age group between 1990 and 2000 (*Figure 7*). Numerical gains were greatest among those in their 30s and 40s and among children and adolescents. Adults between the ages of 30 and 49 are in the family-rearing period of the life cycle, so the influx of children and teens evident in the data suggest a significant inflow of families into New Hampshire. The evidence of the outward sprawl from the Boston metropolitan area noted earlier is entirely consistent with such an influx of families to New Hamp-

shire. Prior research suggests that much of the age-specific migration gain on the urban periphery is family householdsⁱⁱⁱ. The inflow of parent-child households to New Hampshire has significant implications because such households bring considerable social and financial capital. The large number of migrant children also has significant implications for local communities because they put additional demands on local schools.

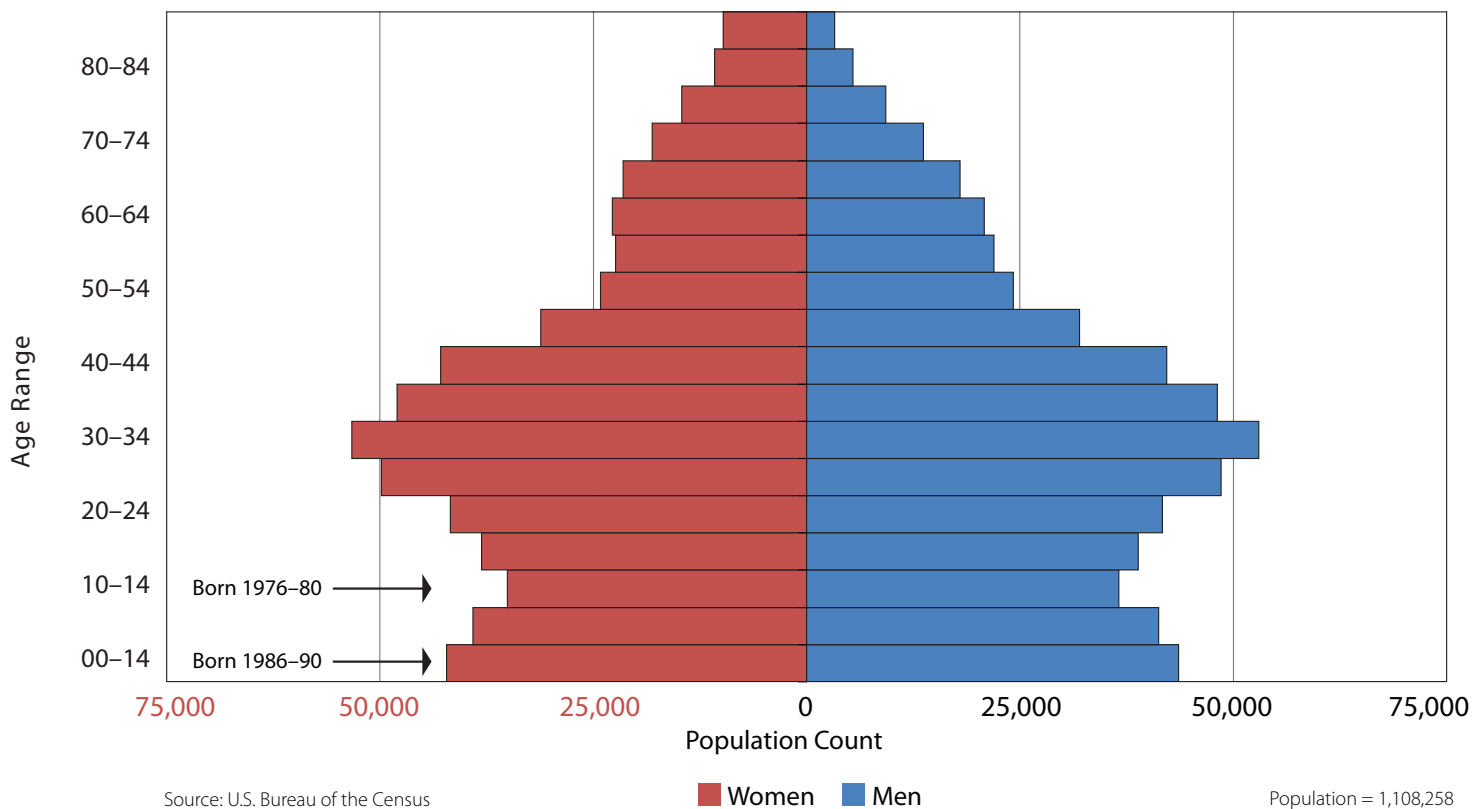
New Hampshire also experienced modest gains among migrants over the age of 50. Research suggests that such migrants are attracted to the high amenity and scenic areas that are abundant in New Hampshire. Data presented earlier identified several areas in central New Hampshire with such recreational concentrations that experienced high growth rates. The influx

FIGURE 7: NEW HAMPSHIRE AGE SPECIFIC NET MIGRATION, 1990 TO 2000



Source: Johnson, et al., 2005 *Demography*
42(4):791-812

FIGURE 8: AGE PYRAMID NEW HAMPSHIRE, 1990



of older migrants to New Hampshire is of particular interest to policy makers because it foreshadows an even greater influx as the large baby boomer cohorts enter this age group.

Young adults are also of concern to policy makers in New Hampshire with much recent discussion about the diminishing number of young adults in the state. Thus, it is important to recognize that New Hampshire has not suffered a significant loss of young adults through outmigration. There was a net outflow of 20 to 29 year olds between 1990 and 2000, but the loss represents only four percent of the age group. Thus, the substantial young adult population decline in New Hampshire was not caused by a massive outflow of young adults from the state.

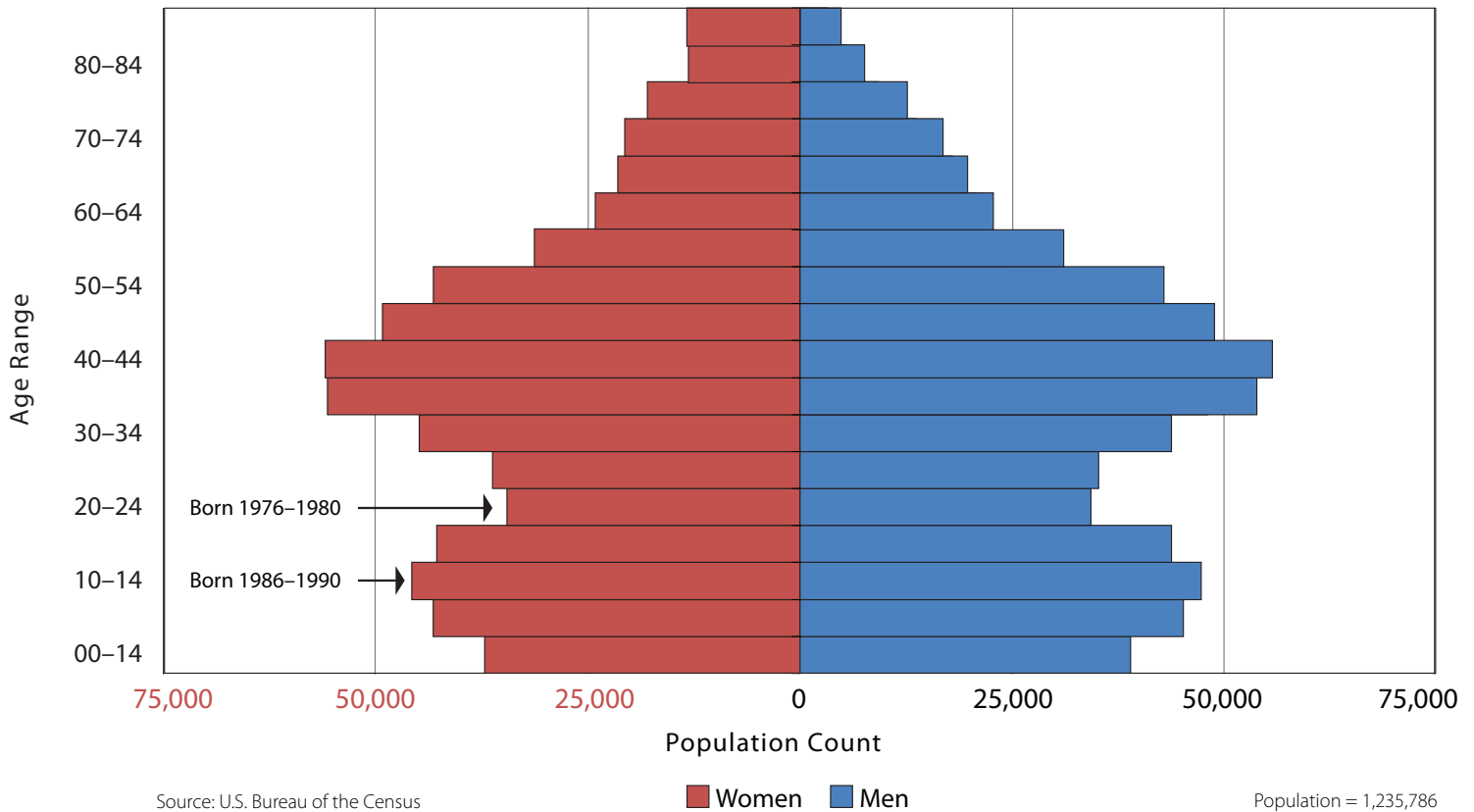
Age Structure Shifts

Because the policy implications of the diminished number of young adults is of considerable importance to the future of New Hampshire, we need to understand the demographic process that has produced these losses. Between 1990 and 2000, the number of people 25 to 34 in New Hampshire declined by 23 percent. Yet, Figure 7 suggests a net inflow of 2,500 25- to 34-year-olds during the period. If young adult outmigration

did not cause this, then what did? The explanation is demographic. The decline occurred because relatively few children were born during the 1970s due to the delayed childbearing and fewer births to baby boomers. More babies were born in New Hampshire during the 1960s as the baby boom waned and again during the 1980s, when the baby boomers finally had children. For example, 26 percent fewer children were born in New Hampshire in the 1970s than during the 1980s. This birth dearth caused the number of young adults to decline during the 1990s.

To illustrate the differential impact of cohort size on the age structure, consider the series of population pyramids (*Figures 8 to 10*) that trace two important cohorts of young New Hampshireites. The first cohort, born during the low fertility period between 1976 and 1980, would have been 25 to 29 by the end of 2005. The second cohort, born during a high fertility period ten years later, was 15 to 19 at the end of 2005. The relative size of these two cohorts is evident in Figure 8. Note that the cohort born 1976 to 1980 is considerably smaller than the cohorts ten years older or ten years younger. Also note that the cohorts who were 25 to 34 in 1990 were even larger because they were born during the baby boom.

FIGURE 9: AGE PYRAMID NEW HAMPSHIRE, 2000

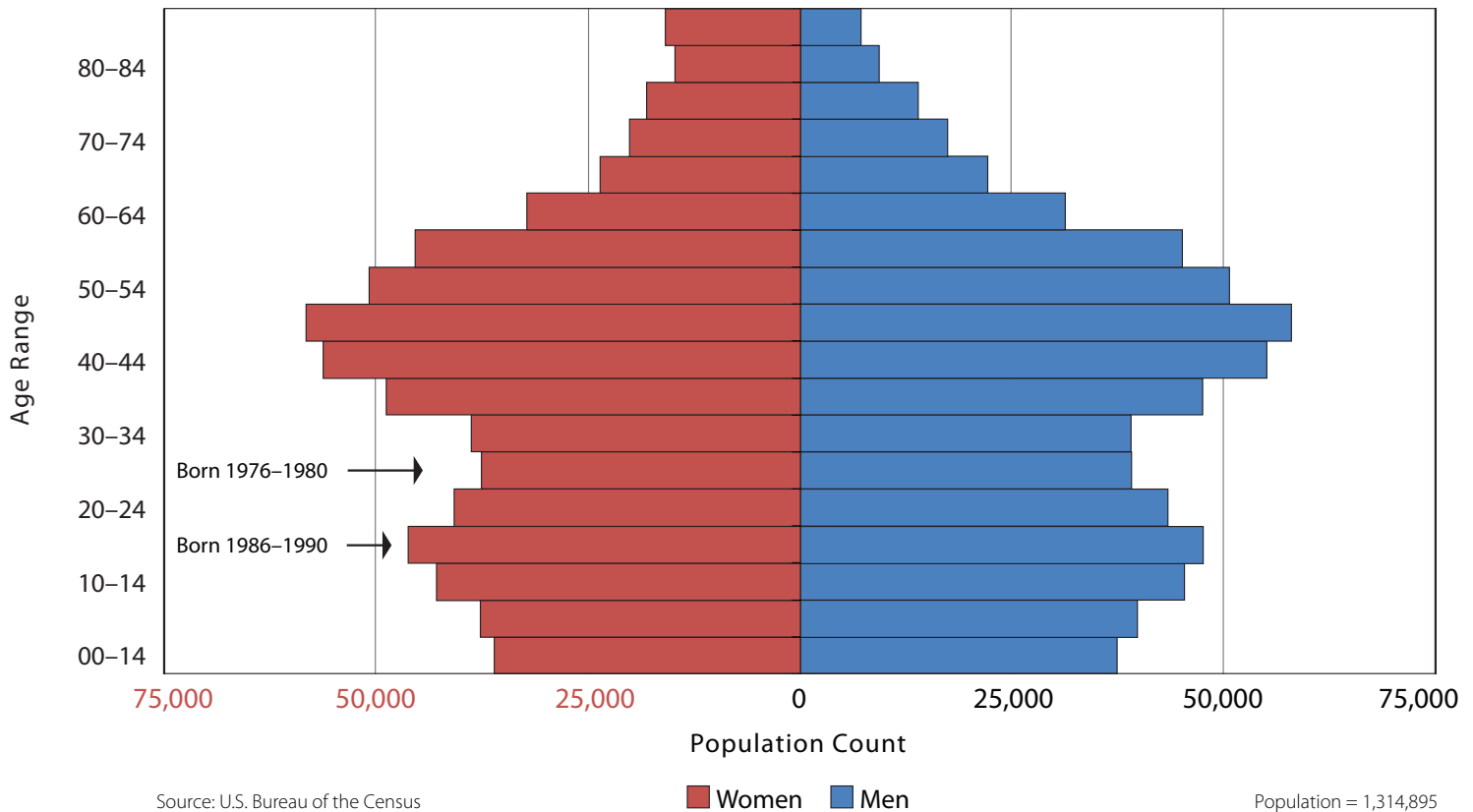


By 2000, the older cohort was 20 to 24 and because it was much smaller than the cohort 10 years older, the number of young adults diminished sharply (*Figure 9*). Meanwhile, the larger cohort born 1986 to 1990 was now in their early teen causing this age group to increase in size compared to ten years earlier. By 2006, the small cohort born 1976 to 1980 reached their late 20s or early 30s and together with the small cohort born just before it were 25 to 34 (*Figure 10*). The large percentage decline in those 25 to 34 that has been widely reported is the result of these two cohorts.

Looking to the future, *Figure 10* clearly demonstrates that the cohorts reaching young adulthood over the next ten years

are already larger than those currently 25 to 34. In fact, the population 25 to 34 is already growing and based on sheer cohort replacement should be 5 percent larger in 2011 and 16 percent larger in 2016. Given the influx of parents and children to New Hampshire, the gain will likely be larger. Thus, the diminished numbers of young adults in New Hampshire is an empirical reality. However, it is imperative that policy makers recognize that the widely publicized drop in the number of 25- to 34-year-olds is not due to young adult outmigration; this young adult loss is now over. The number of young adults in New Hampshire is already growing and will likely continue to do so in the future.

FIGURE 10: AGE PYRAMID NEW HAMPSHIRE, 2006



The age structure data illustrates another major policy concern for New Hampshire. The number of older adults in the state will increase rapidly in the next two decades because of two distinct demographic processes: current residents will age in place and older migrants will continue to settle in New Hampshire. There are currently 82,000 65- to 74-year-olds in New Hampshire who were born during the low fertility years of the late 1930s (*Figure 10*). In contrast, there are 156,000 55- to 64-year-olds and 217,000 45- to 54-year-olds born during the baby boom. Although mortality will modestly diminish these cohorts, the vast majority will reach their 65th birthday. Thus, the older population of New Hampshire will grow through this

aging in place. In addition, New Hampshire has a net gain of older migrants and that stream is likely to swell as the large baby boom cohorts continue to reach their late 50s and 60s. *Figure 7* reflects the beginning of this trend and, as we shall see, the trend is accelerating. Thus, within 20 years the 65- to 74-year-old population will more than double. The demographic implications of this are already evident in the steady increase in the number of deaths in the state. This coupled with the stable or slightly diminishing number of births has the net effect of reducing the rate of natural increase. As a result, New Hampshire will be even more dependent on migration for future growth.

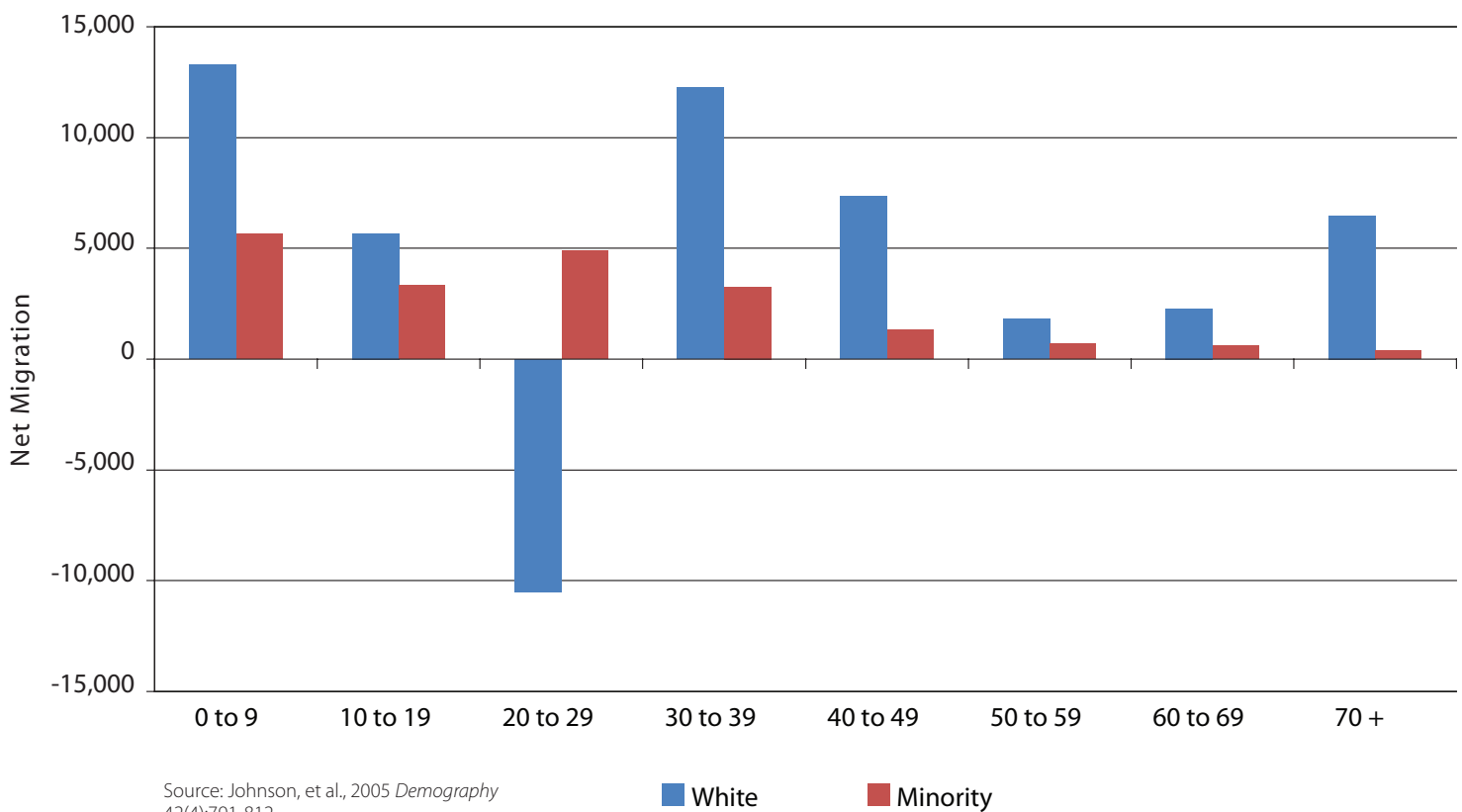
Migration by Place, Race and Hispanic Origin

Most of the net migration gain in New Hampshire is due to an influx of white migrants. Minority migration gains are smaller in magnitude, but consistent in trend with those of whites with one significant exception (*Figure 11*). During the 1990s, New Hampshire received a net inflow of minority migrants 20 to 29, but lost a modest number of whites of that age group. In essence,

the inflow of young minority adults partially offset the outflow of young whites. The inflow of minority children echoes the pattern for whites, though it appears that minority migrants had their children at younger ages than their white counterparts.

There are notable differences in the age specific migration trends to metropolitan and nonmetropolitan areas. Most of the net loss of young adults is from nonmetropolitan areas (*Figure 12*). The absolute loss is greater from adjacent nonmetropolitan

FIGURE 11: AGE SPECIFIC NET MIGRATION FOR WHITE AND MINORITY POPULATIONS IN NEW HAMPSHIRE, 1990 TO 2000



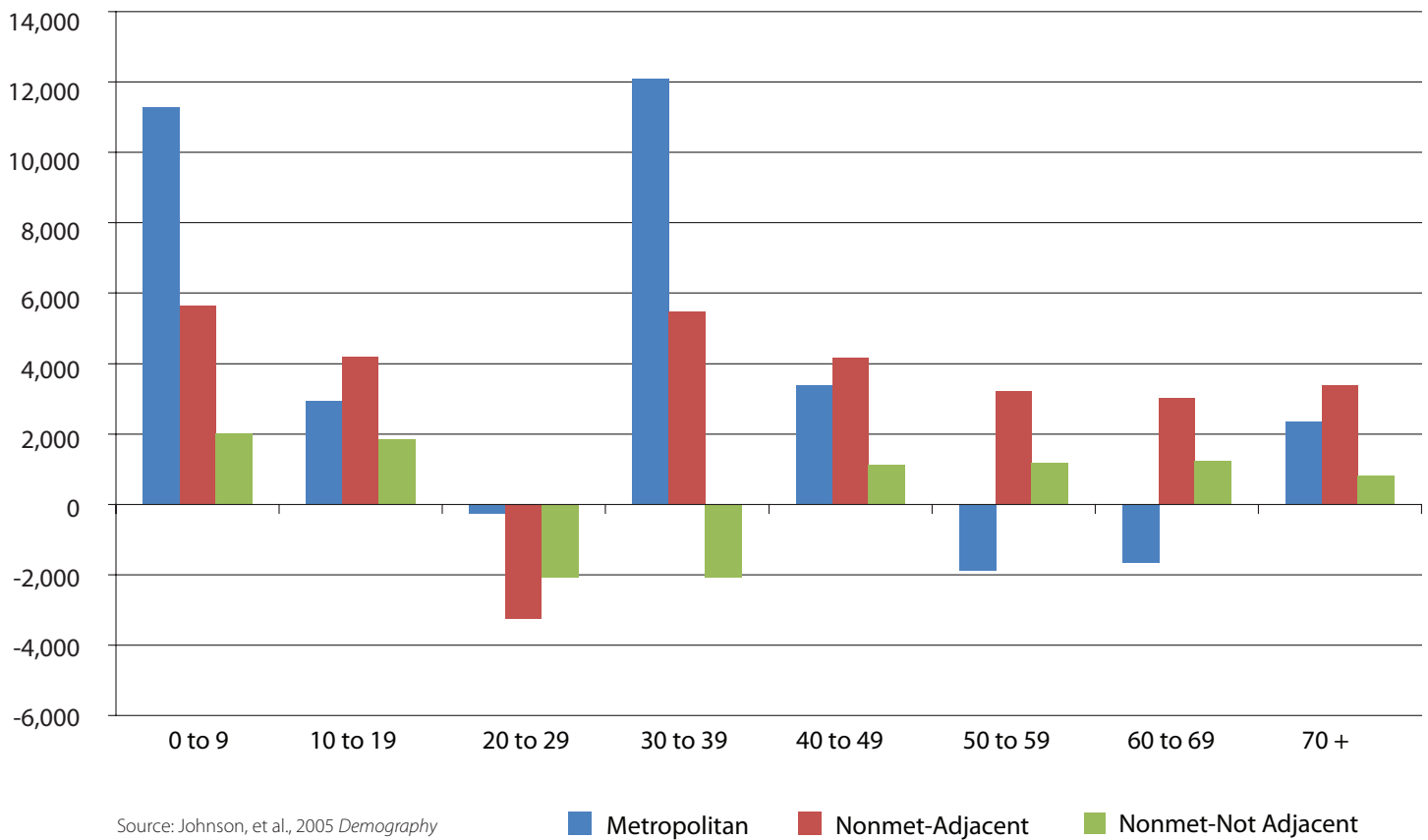
counties, but given the smaller population in nonadjacent counties, the rate of loss is actually greater there. Both metropolitan and adjacent nonmetropolitan counties are receiving a net inflow of parents and children, though the situation is less clear in nonadjacent counties. The inflow of those 50 to 69 is only occurring in nonmetropolitan counties. Given the concentration of amenity destinations there, this net inflow of older adults is to be expected. The net loss of those in their 50s and 60s from met-

ropolitan counties is consistent with national trends suggesting an outflow of older adults to retirement destinations.

Migration Case Studies

Careful examination of the age-specific migration patterns for three New Hampshire counties further clarifies the forces influencing migration. Hillsborough County is the most populous in the state with a population of 403,000 in 2006. It is metro-

FIGURE 12: NEW HAMPSHIRE AGE SPECIFIC NET MIGRATION 1990 TO 2000 BY METROPOLITAN STATUS



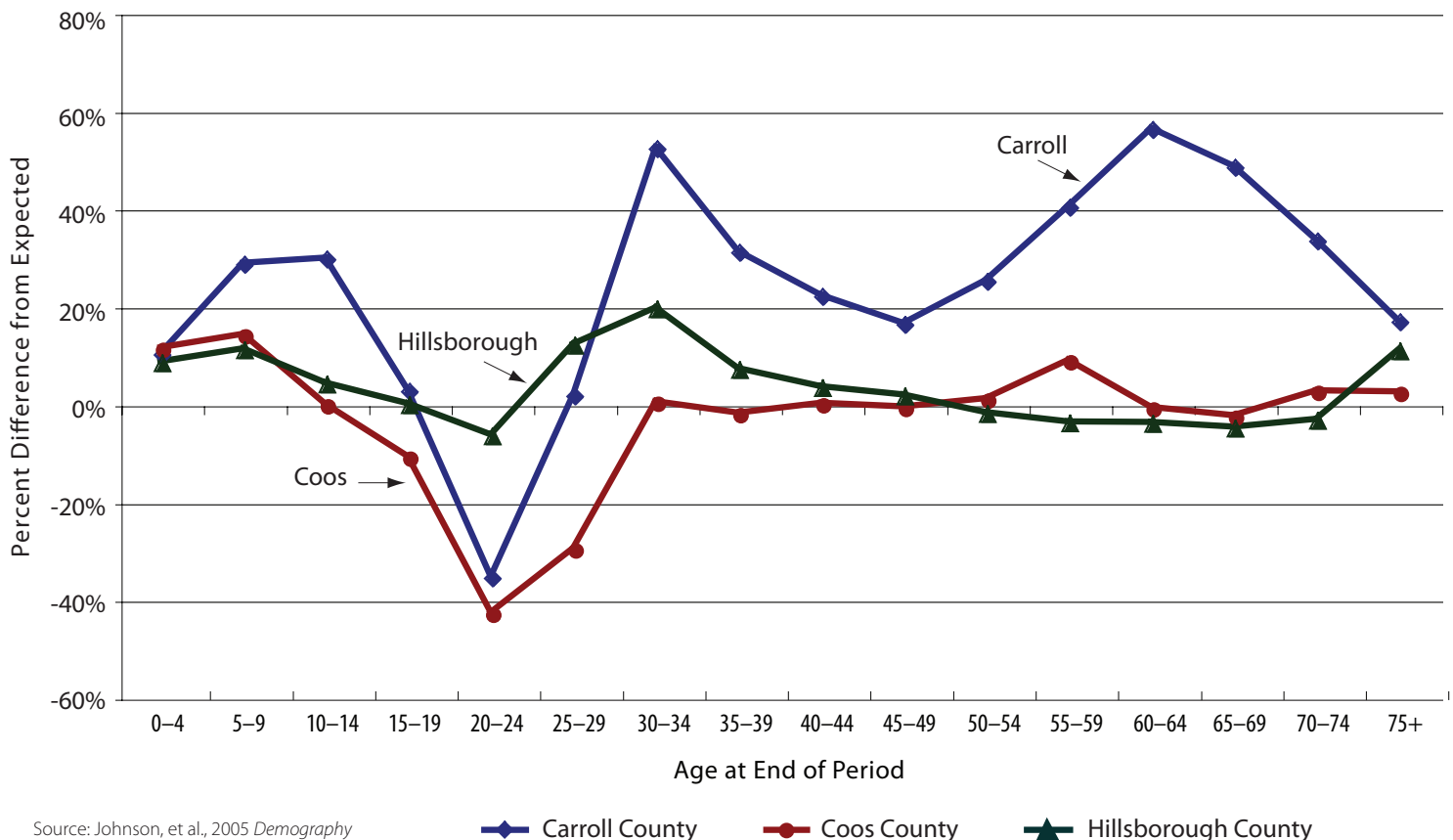
politan because it contains the city of Manchester, which transformed itself from a fading mill town to a diversified regional center over the past several decades. In addition, the proximity of the Boston metropolitan area has contributed to its growth. Age specific net migration patterns in the county reflect this with a net inflow of those in their 30s and of children (*Figure 13*). The county is retaining most of its young adults, but is losing its retirement age population. This migration signature is consistent with national trends for similar metropolitan areas.

A very different migration signature is evident in the northernmost and least populated county in the state. Coos County has 33,700 residents, roughly the same population it had in 1970. This lack of growth coincides with the decline of the paper and pulp industry, a longtime mainstay of the local economy. Coos County also has significant recreation resources as reflected in the 21 percent of its housing that is second homes. The differential influence of forest products and recreation is evident in local migration patterns. Coos County is losing many of its 20- to 39-year-olds, an outflow that has been go-

ing on for decades (data not shown). Coos has seen a modest influx of those 50 to 59. This protracted outflow of young adults together with the relative stability of the older population has produced natural decrease there because few young adults remain to produce the babies needed to offset the rising mortality of the large older population. The Coos migration signature is an amalgam of those common in resource-dependent counties, where outmigration of working age adults is common because employment opportunities are limited, and recreational counties, where an influx of amenity migrants in their 50s is typical.

Carroll County is representative of 300 nonmetropolitan recreational counties around the country that are major rural growth nodes. Situated in an amenity rich area accessible to lakes, mountains, and winter sports, its appeal as a recreational destination is reflected in the 43 percent of the housing that is second homes and in the near doubling of its population in the last 25 years. Carroll's migration signature is dominated by an influx of those

FIGURE 13: NET MIGRATION FOR SELECTED NEW HAMPSHIRE COUNTIES, 1990 TO 2000



in their 50s and 60s, the hallmark of a recreational and retirement destination county. However, such amenity migration has also stimulated an influx of those in their 30s with accompanying children. Such working age populations are attracted by the same amenities that appeal to older migrants as well as by the economic opportunities that result from amenity migration. Carroll's proximity to metropolitan New Hampshire and to the capital in Concord make it appealing to commuters. Despite its appeal, Carroll lost some of its young adults; consequently few babies are born to offset the high mortality of retirement migrants. If not for the inflow of migrants, it would have little, if any, population increase.

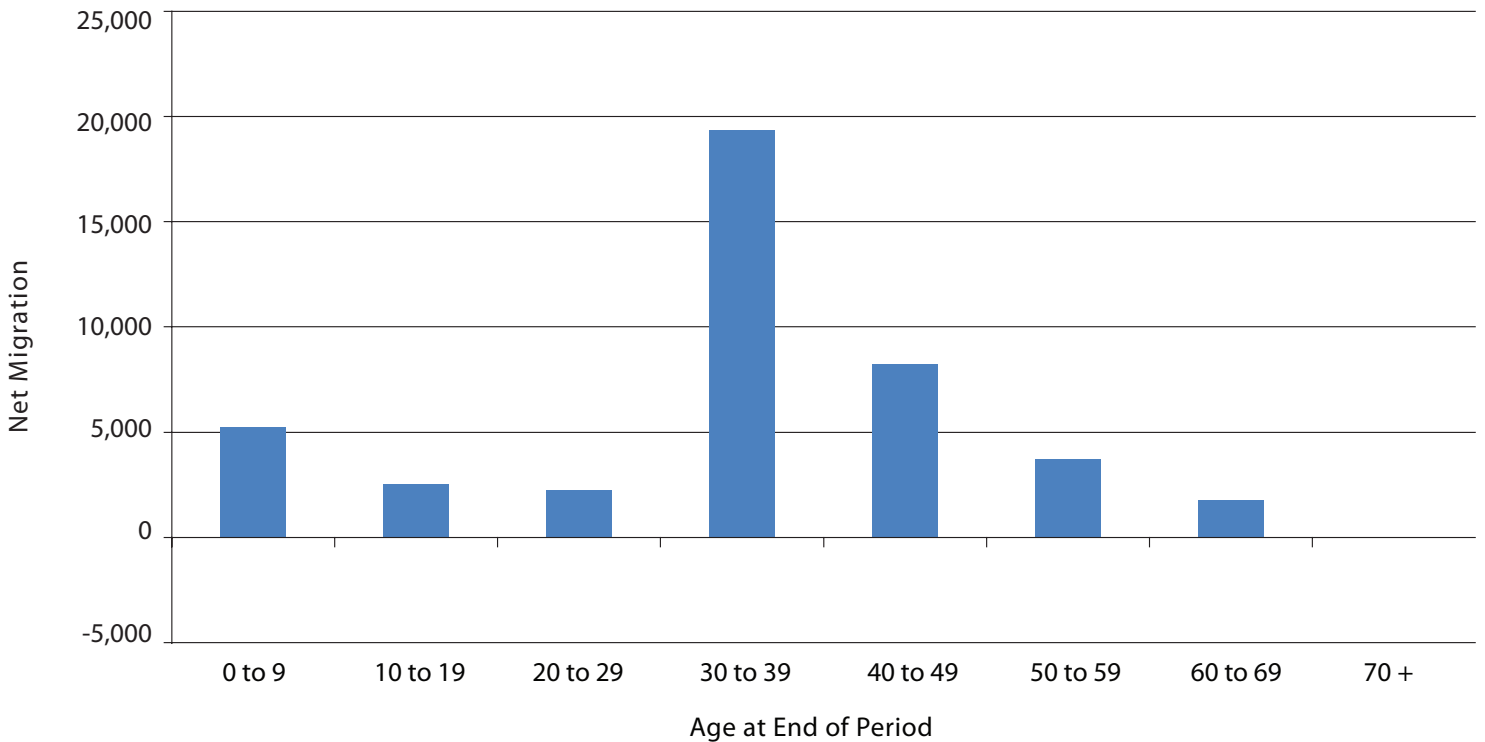
New Hampshire's Demographic Future

Given the importance of migration to New Hampshire's future, what do current migration trends suggest? Recent Census estimates suggest the inflow of migrants to New Hampshire is continuing, but may have slowed somewhat in the last year or

two. Whether this represents new trends or minor year-to-year fluctuations remains to be seen.

Without the detailed data available in the decennial Census, only an estimate of post-2000 age specific net migration is possible. This estimate for 2000 to 2005 suggests a continuation of the inflow of those 30 to 49 and of children. There is also evidence of increased net gains among those 50 to 69, in part, because the larger baby boom cohorts are now entering this age group (*Figure 14*). New Hampshire also appears to be receiving a net influx of 20- to 29-year-olds. This differs from the trend of the 1990s, when there was modest outflow of this age group. It underscores the point that the declining number of young adults in New Hampshire is not due to outmigration, but to the differential size of the birth cohorts born decades ago. If anything, migration is now increasing the young adult population. However, these are estimates and need to be interpreted with caution.

FIGURE 14: ESTIMATED NEW HAMPSHIRE AGE SPECIFIC NET MIGRATION, 2000 TO 2005



Migration and Income Flows in New Hampshire

Using Internal Revenue Service data to examine the flow of population and income to and from New Hampshire provides further insights into how migration is reshaping the state.^{iv} Such data reveal that 21,000 more people moved into New Hampshire than left from 2001 to 2005. The sheer volume of migration that produced this net change is stunning. Some 210,000 people moved in to New Hampshire and 189,000 left. So, nearly 400,000 people moved in and out of the state to produce the net change of 21,000.

New Hampshire benefits from migration exchanges with other areas of the Northeast, such as the Mid-Atlantic states.

Some 26,700 New Hampshire residents left for the Northeast, but nearly 28,200 migrated in, resulting in a net gain of 1,500 (Figure 15). New Hampshire also gained from migration exchanges with foreign countries.^v In contrast, it suffered significant losses in exchanges with the South and, smaller losses, to the West and Midwest. More than 56,600 people left New Hampshire for the South between 2001 and 2005, but only 32,600 southerners moved to New Hampshire; a net loss of 24,000. New Hampshire's aggregate loss from exchanges with other regions was 25,000.

FIGURE 15: REGIONAL MIGRATION TO AND FROM NEW HAMPSHIRE

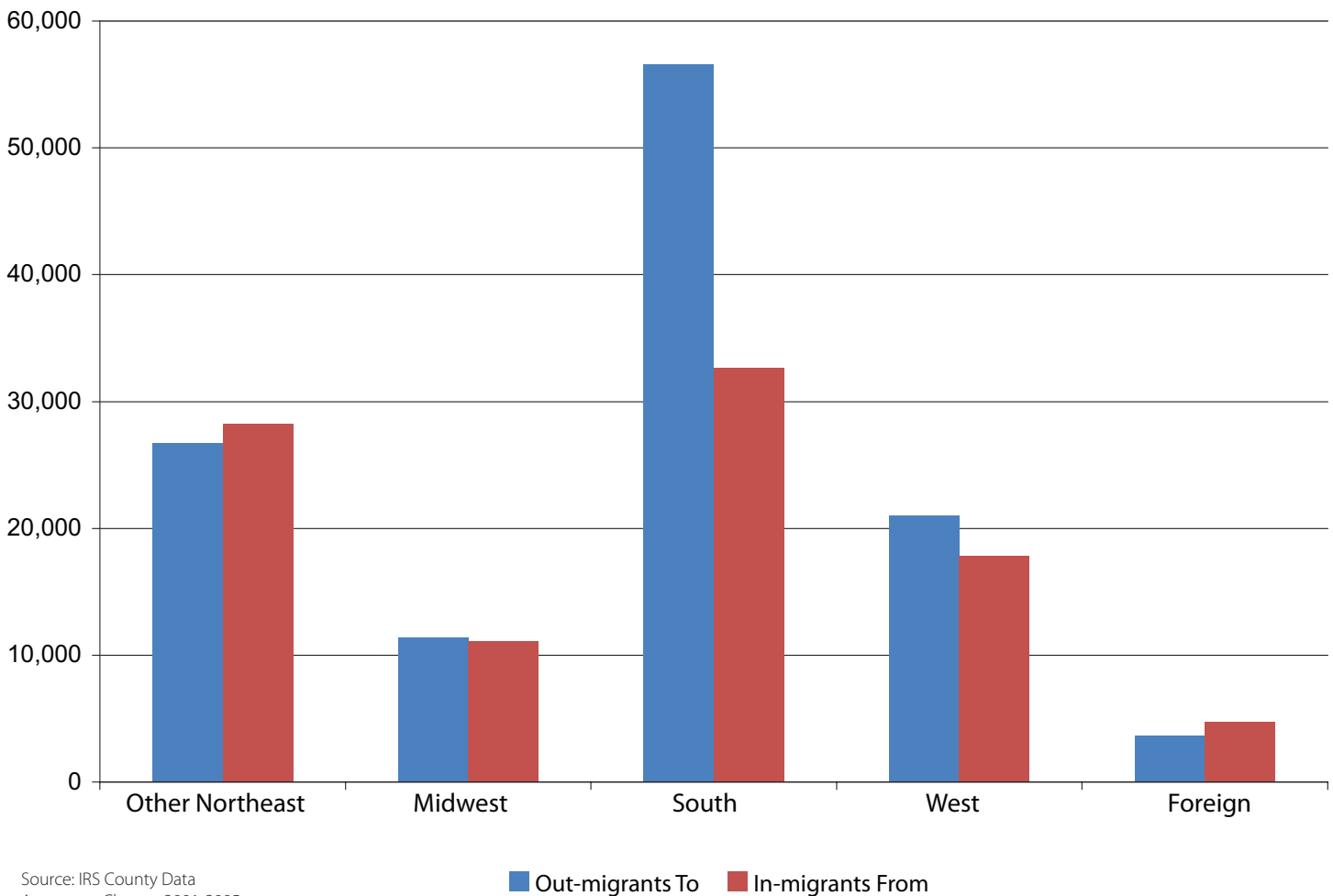
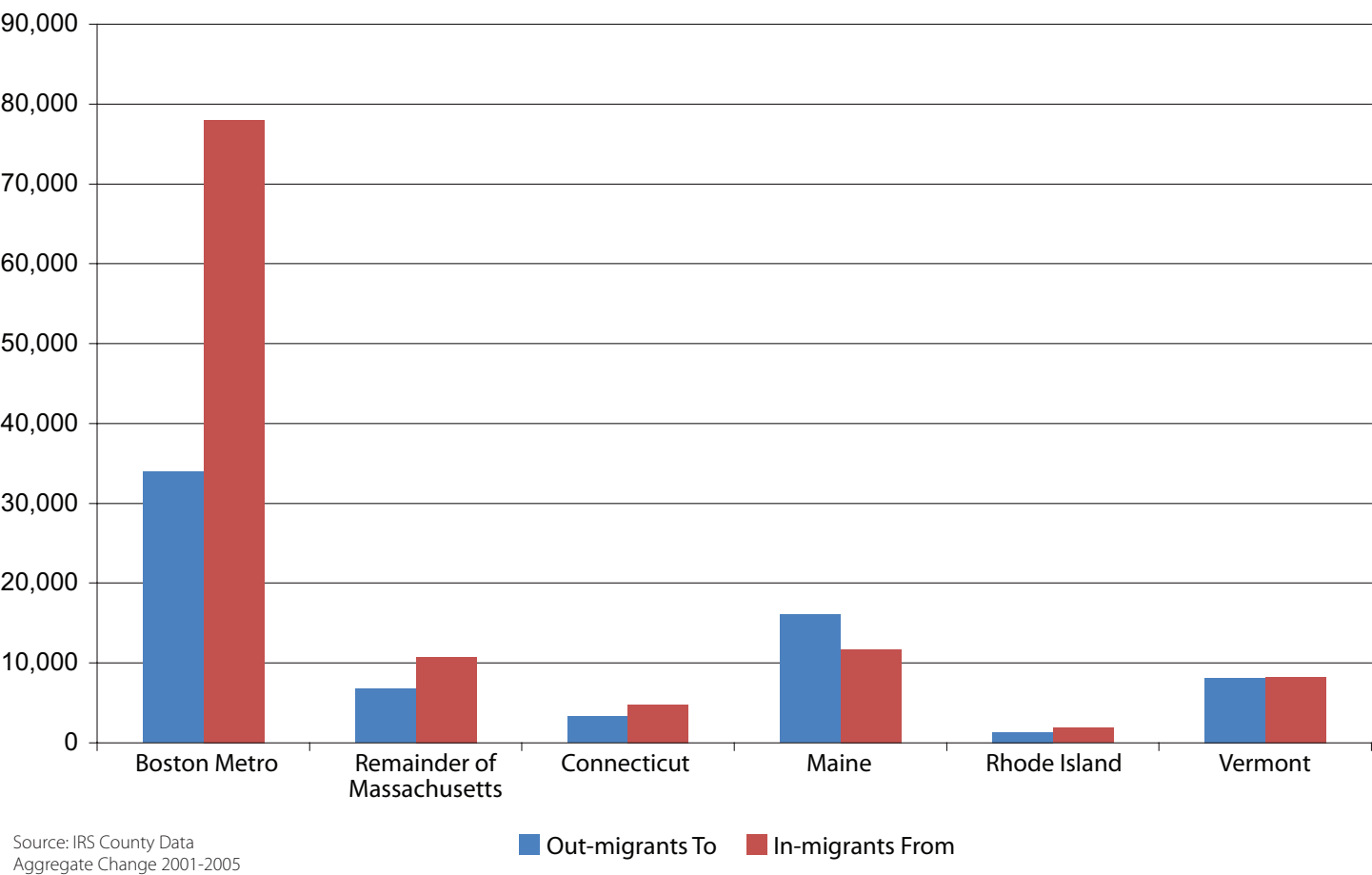


FIGURE 16: NEW ENGLAND MIGRATION TO AND FROM NEW HAMPSHIRE



New Hampshire benefited the most from intra-regional flow of migrants within New England. The Boston metropolitan area is the biggest source of in-migrants to New Hampshire. Over 78,000 people moved from Boston to New Hampshire, while only 34,000 moved in the opposite direction resulting in a net migration gain of 44,000 (*Figure 16*). The state also gains in migration exchanges with the remainder of Massachusetts and with all other New England states except Maine. The loss to Maine is nearly 4,300. New Hampshire gains a total of 46,000 migrants in exchanges with the rest of New England. This intra

regional gain exceeds interregional losses producing the overall gain of 21,000 migrants during the five-year period.

Demographic trends during this period have implications that reach beyond population redistribution. Migration also redistributes income. New Hampshire migration gains are matched by a significant income gains. Households leaving New Hampshire had an aggregate income of roughly \$5.31 billion, whereas those moving in earned \$6.73 billion. So, New Hampshire gained \$1.42 billion dollars in migration exchanges as well as 21,000 residents^{vi}.

New Hampshire loses income in migration exchanges with other regions of the country. The greatest loss is to the South where the incomes of those leaving exceed that of in-migrants by \$622 million dollars (*Figure 17*). The average household income for those leaving New Hampshire for the South (\$50,800) is lower than the incomes of those moving from the South to New Hampshire (\$52,700), but, because so many more people leave for the South than come from it, the income loss is substantial. A similar pattern exists in migration exchanges with the West, though the loss is a modest \$53 million. In migration exchanges with the Midwest, New Hampshire loses migrants, but actually gains income because the households moving in have higher average incomes (\$65,900) than those for households leaving (\$44,383). New Hampshire gains an additional \$50 million in migration exchanges with the Mid-Atlantic states of the Northeast.

Migration within New England produces a significant positive income flow for New Hampshire. The largest gain (\$1.64 billion) comes from its migration exchange with metropolitan Boston (*Figure 18*). Most of the gain is because so many more people move from metropolitan Boston to New Hampshire than in the opposite direction. However, household incomes of those moving from Boston to New Hampshire (\$64,200) are also considerably higher than those moving in the opposite direction (\$48,202). New Hampshire gains another \$154 million in income from its migration exchanges with the rest of Massachusetts and the other states in New England. Only in migration exchanges with Maine does it lose income. So, New Hampshire gains both from the net inflow of migrants and from the considerable incomes differential (\$9,200) between in and out migrants.

FIGURE 17: REGIONAL MIGRANT INCOME FLOWS TO AND FROM NEW HAMPSHIRE

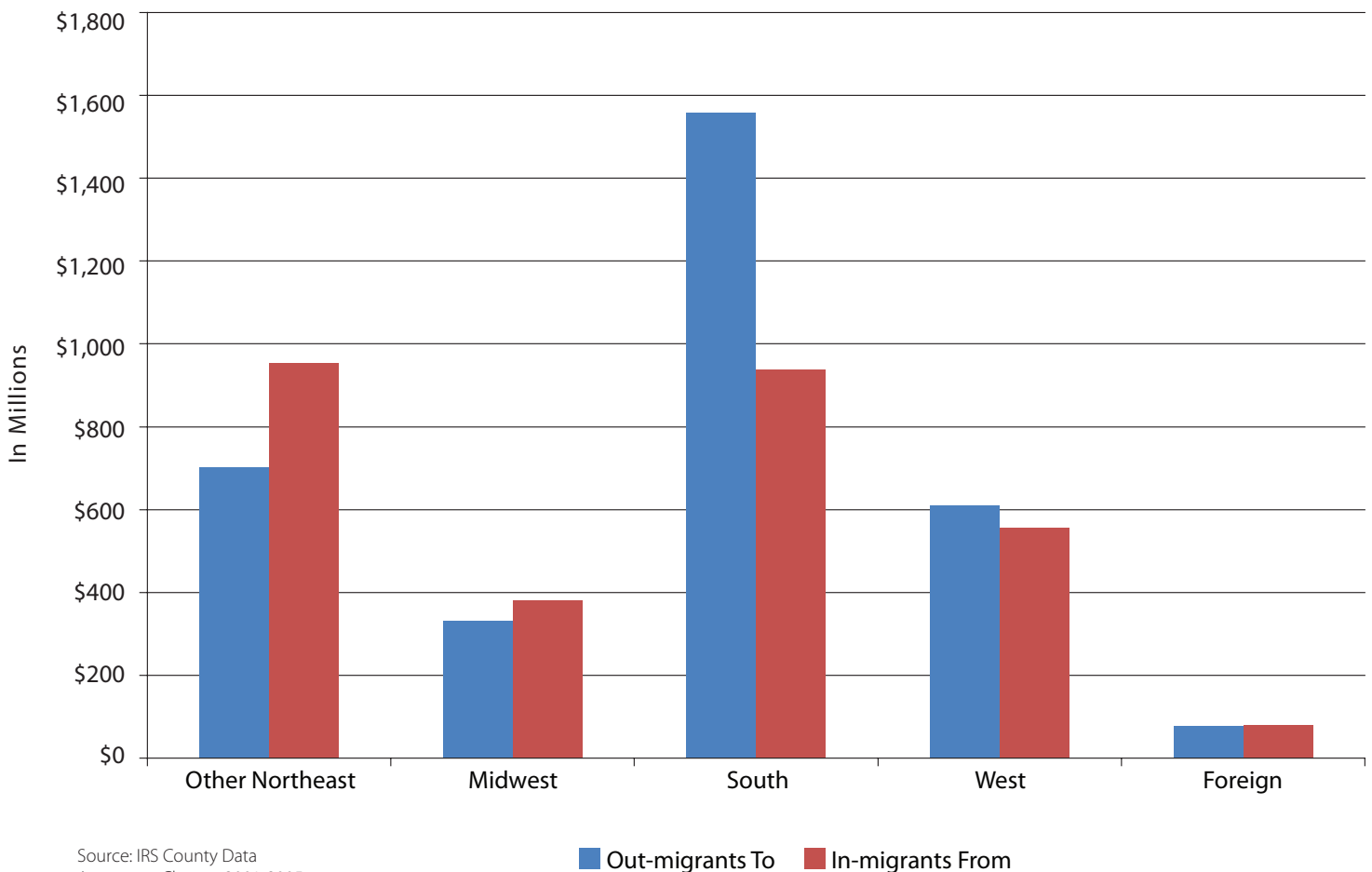
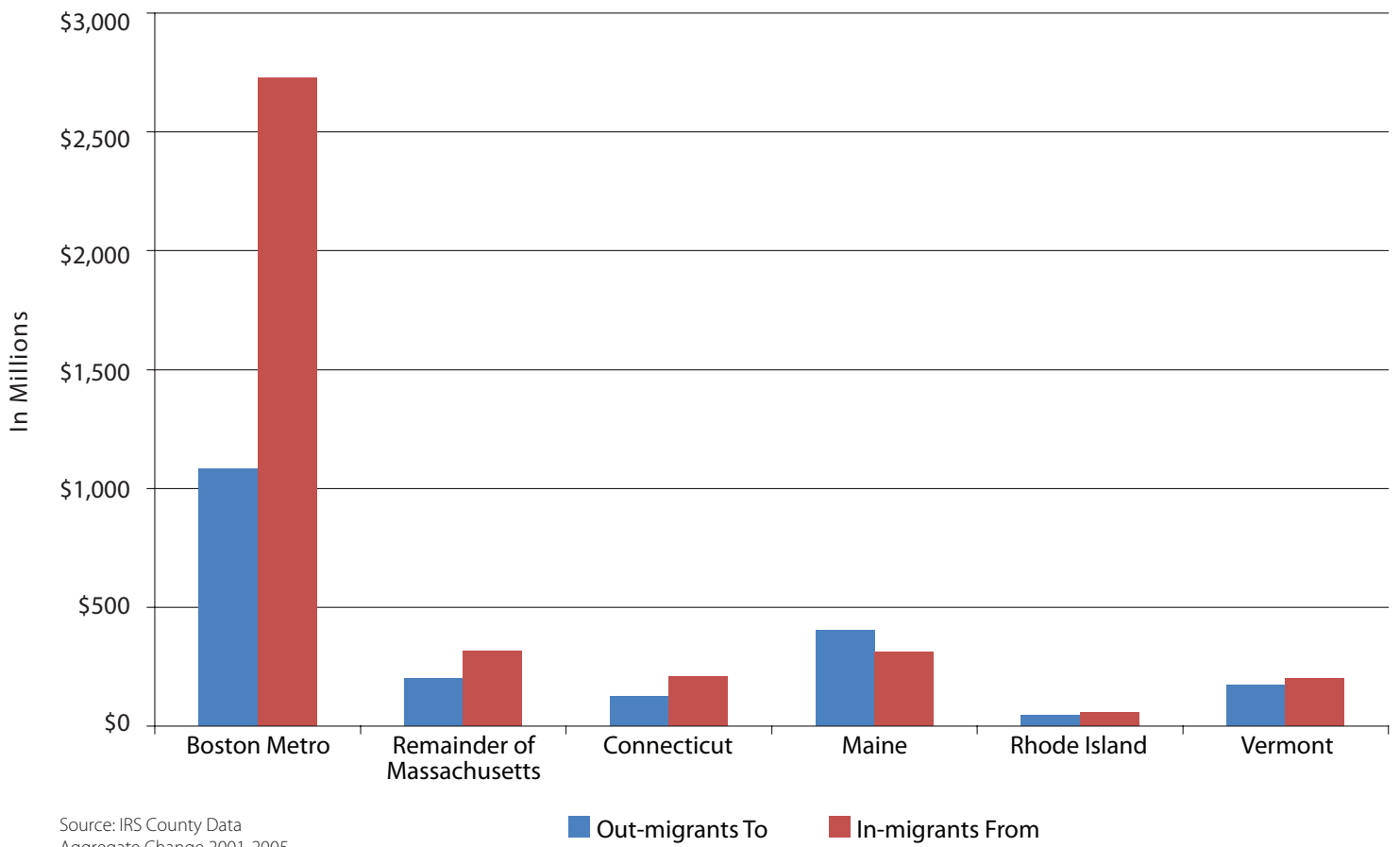


FIGURE 18: NEW ENGLAND MIGRANT INCOME FLOWS TO AND FROM NEW HAMPSHIRE



Conclusion

New Hampshire gained 79,000 residents between 2000 and 2006. This 6.4 percent gain matches the growth rate of the United States and is more than twice that of the rest of New England. Most of this population gain is from domestic migration though it was supplemented by modest immigration and natural increase. New Hampshire gained more than \$1.4 billion dollars from migration because of the significant surplus of in-migrants and because of the higher household incomes of those moving in. New Hampshire is and will likely remain a largely white non-Hispanic state, but minorities accounted for a disproportion share of the population increase between 2000 and 2006, which modestly increased the diversity of the state.

New Hampshire's young adult population in 2006 is some 25 percent smaller than it was in 1990, but this decline was not the result of significant young adult outmigration. In fact, a modest loss of 20- to 29-year-olds loss during the 1990s has already been offset by a recent inflow of young adults. The precipitous decline in young adults occurred because relatively few babies were born during the 1970s. The cohorts born both before and after these "baby bust" cohorts were larger, so when they reached young adulthood in the 1990s the young adult population declined. That period is now over and the young adult population is growing both because the birth cohorts born in the 1980s were larger and because the state is enjoying a net inflow of young migrants.

Population gains were slightly greater in nonmetropolitan New Hampshire because of higher rates of domestic migration. In contrast, immigration was modest and there were barely

enough births to offset deaths. Rural migration was caused by the attraction of the recreation and amenity areas and by urban sprawl. A large proportion of these nonmetropolitan migrants were in their 50s and 60s, though there was also a significant net inflow of 30- to 49-year-olds and their children. Nonmetropolitan areas did lose some young adults. In northern New Hampshire, the protracted out-migration of these young adults has produced natural decrease. Whites accounted for the vast majority of the growth in nonmetropolitan areas, though minority populations also grew.

In metropolitan New Hampshire growth was balanced between natural increase, domestic in-migration and immigration. These areas benefit from the outward sprawl of the Boston metropolitan areas as well as from regional economic gains. Population gains were greatest among age groups likely to include parent-child households. Metropolitan New Hampshire is also retaining most, if not all, of its young adults, but losing its retirement age population.

The future of New Hampshire depends, in part, on the size, composition, and distribution of its population. This report provides insights into the patterns of demographic change underway in the state using the latest data available. For New Hampshire to continue to grow and prosper, policy makers must be cognizant of these demographic trends as they consider the future needs of its people, institutions, and organizations.

Methods and Data

The data for this project was assembled from a variety of sources. Most is from the U.S. Census Bureau. Data were obtained from the 1990 and 2000 Census and the 1990 and 2000 Modified Age-Race-Sex file (MARS) prepared by the U.S. Census Bureau. Detailed race-based birth and death data were obtained from the National Center for Health Statistics. Additional data for 1990 to 2006 come from the Federal State Cooperative Population Estimates series (FSCPE). Such estimates have proven quite reliable in the past, but results must be interpreted with caution. To produce a database consistent in time and structure, a number of additional estimates and adjustments were made using procedures widely accepted by demographers. Although these estimation and adjustment procedures introduce some uncertainty into the results, conclusions here accurately represent the overall demographic trends in New Hampshire.

The age-specific net migration estimates were produced using a modified cohort-component method. Detailed birth and death data by age, race, and sex were obtained from the National Center for Health Statistics. The 1990 and 2000 Census populations were adjusted for the enumeration undercount prior to calculating age-specific net migration. A detailed description of the methods and data employed for these calculations is available^{vii}.

Data on migration and income flows between counties are from the Internal Revenue Service County-to-County Migration Flow Data. The IRS measures migration by comparing the

county of residence in successive years of income tax returns. For each return indicating a change in county of residence, the county of origin, destination, number of dependents and income is reported. Coverage includes between 95 and 98 percent of all tax returns filed. However, the data series excludes persons that do not file returns (due to low income, income from non-taxed retirement plans, recent international immigrants, some undocumented immigrants, etc.). Although the coverage is not complete, the vast majority of the population is included and findings reported for the IRS data are likely to closely approximate overall migration trends.

The unit of analysis for this study is the county. Though counties are not significant units of government in New Hampshire, they are important units for the collection of demographic data. They are also the basic building blocks for metropolitan areas. In many cases, the county level data are aggregated to other levels of geography. For purposes of this study, the Boston metropolitan area is defined as the Boston-Cambridge-Quincy Metropolitan Statistical Area. Rockingham and Strafford counties in New Hampshire are omitted from the Boston metropolitan area for the IRS migration calculations.

Endnotes

ⁱ Kenneth M. Johnson is the Senior Demographer at the Carsey Institute at the University of New Hampshire and a Visiting Professor of Sociology at the University of New Hampshire. Allison Churilla of the Carsey Institute provided research assistance on this project and David Goldblatt of Loyola University-Chicago produced the maps. Research for this project was funded by the Carsey Institute and by grants to Dr. Johnson from the Northern Research Station of the U.S. Forest Service as well as the Economic Research Service and Cooperative States Research Service of the U.S. Department of Agriculture.

ⁱⁱ Because the data and computational demands required to produce such detailed age-specific migration estimates are substantial, they can only be produced with data from the decennial Census.

ⁱⁱⁱ Prior national level age-specific net migration research suggests very distinct migration signatures for counties based on their proximity to metropolitan areas. See Johnson, K.M., P.R. Voss, R.B. Hammer, G.V. Fuguitt and S. McNiven. 2005. "Temporal and Spatial Variation in Age-Specific Net Migration in the United States." *Demography*, 42(4): 791-812.

^{iv} IRS data do not cover the entire population, but the coverage is quite comprehensive. Therefore, conclusions drawn from analysis of the IRS migration data are likely to be indicative of overall migration and income streams to and from the region.

^v Migrants from foreign areas include U.S. residents returning from overseas assignments.

^{vi} The income gain resulting from migration only includes the income of the household in the year they enter the state. That is, for a household moving to New Hampshire in 2002, only the income earned in that tax year is included in our calculations. The additional income they earn in 2003, 2004 and 2005 is not included. Thus, our estimate of the income gain garnered by migration is conservative.

^{vii} See Johnson, K.M., P.R. Voss, R.B. Hammer, G.V. Fuguitt and S. McNiven. 2005. "Temporal and Spatial Variation in Age-Specific Net Migration in the United States." *Demography*, 42(4): 791-812.

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KENNETH M. JOHNSON is Senior Demographer at the Carsey Institute and Visiting Professor of Sociology at the University of New Hampshire. He is a Ph.D. demographer and sociologist specializing in U.S. demographic trends. Dr. Johnson is a nationally recognized expert on population redistribution and demographic trends in nonmetropolitan areas of the United States. He has done extensive research on changing demographic trends in rural and urban America, on recreational and high amenity areas, and on the environmental impact of demographic change. His research has been funded by grants from the U.S. Department of Agriculture, Economic Research Service, and U.S. Forest Service.

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